

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Dany Sylvain  
Serial No. 10/693,807

Examiner: Sall, El Hadji Malick  
Art Unit: 2157

Filed: 10/24/2003

For: **REHOMING VIA TUNNEL SWITCHING**

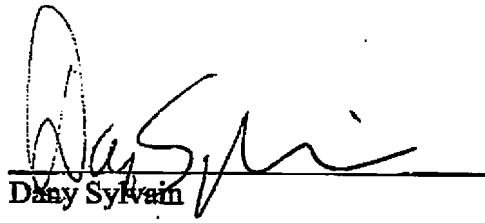
Mail Stop Amendment  
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

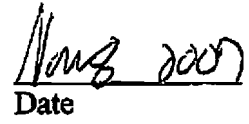
Sir:

**DECLARATION UNDER 37 C.F.R. § 1.131 OF DANY SYLVAIN**

1. My name is Dany Sylvain and I am an employee of Nortel Networks, Inc. (hereinafter "Nortel"), a wholly owned subsidiary of the assignee of the present application. I have been employed by Nortel since 1981. As part of my obligations under my Employment Agreement, I am obligated to assign any rights to inventions to the present assignee.
2. I am the inventor of Patent Application Serial No. 10/693,807 entitled "REHOMING VIA TUNNEL SWITCHING" (hereinafter "Patent Application").
3. I have reviewed claims 1-36 presently pending in the Patent Application (hereinafter "Present Invention").
4. At least as early as February 22, 2003, I conceived of the Present Invention as evidenced by the Invention Disclosure entitled "Rehomings via VPN Tunnel Switching," which is attached to this Declaration as Appendix A.
5. On February 22, 2003, I completed the Invention Disclosure and submitted it to the Intellectual Property Law Department at Nortel. Between February 22, 2003 and April 7, 2003, Rick Witcher, in-house patent attorney for Nortel, reviewed the Invention Disclosure and made a final decision to file a patent application seeking protection for the invention disclosed in the Invention Disclosure.

6. On or about April 7, 2003, I received a copy of a memo from the in-house patent attorney of Nortel, which is attached as Appendix B, that instructed Benjamin S. Withrow of the law firm of Withrow & Terranova, PLLC to prepare and file a patent application for the Invention Disclosure.
7. From a period beginning soon after April 7, 2003, and continuing through October 24, 2003, I met with the attorney Benjamin S. Withrow and worked with him to prepare the Patent Application claiming the invention disclosed in the Invention Disclosure.
8. On June 5, 2003, I received a first draft of the Patent Application (hereinafter "First Draft") from Benjamin S. Withrow's assistant, Jennifer Alkove, as evidenced by the e-mail attached to this Declaration as Appendix C.
9. Between June 5, 2003, and August 21, 2003, I reviewed the First Draft. On or about August 21, 2003, I sent comments to Benjamin S. Withrow regarding the First Draft.
10. On or about August 25, 2003, I received a copy of a revised Patent Application and the inventor declaration and assignment documents from Benjamin S. Withrow's assistant, Jennifer Alkove.
11. On or about August 29, 2003, I returned the signed inventor declaration and assignment document to the attorney, Benjamin S. Withrow.
12. Upon information and belief, the Patent Application was filed with the U.S. Patent and Trademark Office on October 24, 2003.
13. I hereby declare that all declarations made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

  
Daisy Sylvain

  
Date

# **Appendix A**

## Invention Disclosure Submission Reply

<b>Disc No:</b>		<b>Received Date:</b>	22 feb 2003
<b>Disclosure Title:</b>	Rehomring via VPN tunnel switching		

## ==== Inventors =====

Global Id	Name	Work Info	Home Info
	<b>HR Name:</b> SYLVAIN, <b>DANY</b> <b>Known As:</b> DANY <b>Email:</b>  <b>Mgr First Name:</b> STEPHEN <b>Mgr Last Name:</b> ELLIOTT <b>Mgr Global ID:</b>	<b>Location:</b>  <b>Location Code:</b> \ <b>Dept:</b> <b>Phone:</b> <b>Ext Phone:</b> <b>Fax:</b> <b>Ext Fax:</b> <b>MailStop:</b> <b>Citizenship:</b>	<b>Address:</b>   <b>Phone:</b>

## ==== Attachments =====

File Name	File Type	File Comments
L2TP_switching.ppt	Microsoft Powerpoint (*.ppt)	

&lt;End of Attachments&gt;

<b>Were there additional inventors involved:</b>	no	<b>Was there contractor involvement:</b>	no
<b>Name of Supervisor or Divisional Head:</b>		<b>Name of VP:</b>	
STEVE ELLIOTT		SUE SPRADLEY	
<b>LOB:</b>	WIRELINE NETWORKS	<b>Business Unit:</b>	TDM PORTFOLIO & SOLUTIONS DELIVERY
<b>Conception Date:</b>			
<b>Has this invention been discussed with others? If so, please complete:</b>			
<b>Inside Nortel - Whom?</b>	LIAM CASEY	<b>Outside Nortel - Whom?</b>	
<b>Inside Nortel - When?</b>	14 feb 2003	<b>Outside Nortel - When?</b>	
<b>NDA?</b>	no		
<b>Are you aware of any imminent future disclosures? Please provide dates and details:</b>			

<b>Keywords for Searching:</b>		<b>Products that will use this invention:</b>	
Mobile IP, mobility, L2TP, IPSec, multiple access			
<b>Does this invention arise from any arrangement involving an external organization?</b>			
<b>Is this invention relevant to a Standards Activity?</b>		<b>Internal Funding Project #'s:</b>	
no			

### **Technical Information**

**Brief Description of the Invention:**

A computing device roaming across diverse access network (WLAN, Wireless, LAN, etc.) needs to keep running network applications (email, browsing, etc.) even when changing access networks. A VPN client (e.g. Contivity) is running on the device and allow the device to reach its home network via an arbitrary access network. A VPN RAS terminate the VPN tunnel at the home network. When the device roams to another network, its initial VPN connection is lost as well as its current IP address. Entering the new access network, the device performs automatically (or with the user's help) log on to the new network and gets a new IP address. This triggers the VPN client to automatically try to reconnect to the VPN RAS, reusing the same userid and password as in the first network. The VPN RAS recognizes that the same userid is reconnecting (within a short time frame, say 1-5 minutes) and will therefore allocate the same VPN IP address as previously.

**Problem Solved by the Invention:**

Allows users to freely roam across different network administrative domains and preserve service continuity.

**Solutions that have been tried and why they didn't work:**

Mobile IP is the current solution but was designed to operate under a single administrative domain. Mobile IP has several security issues. Mobile IP requires that the some of the network routers be upgraded to support Mobile IP.

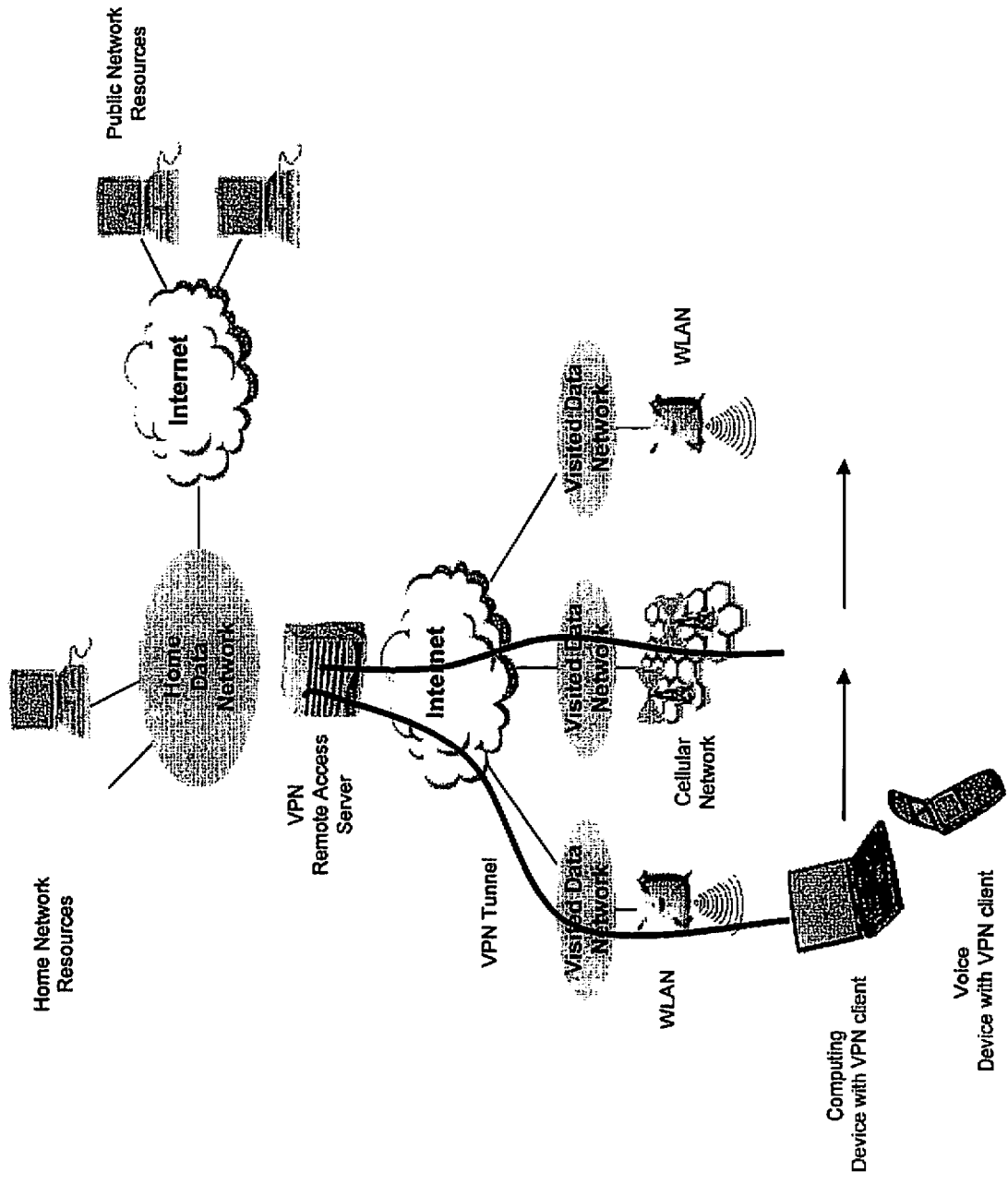
**Specific elements or steps that solved the problem and how they do it:**

See chart.

**Commercial value of the invention to Nortel and Nortel's major competitors:**

Allows Nortel applications (e.g. voice, multimedia) to work seamlessly across various networks.

# Rehomming via VPN tunnel switching



# **Appendix B**



7000-265

# NORTEL NETWORKS

4006 E. Highway 54  
Dept. N237, MS D16/02/0E2  
Network Center 2  
Durham, North Carolina 27713

John R. Witcher, III  
Senior Counsel

## NORTEL NETWORKS CONFIDENTIAL & PRIVILEGED COMMUNICATION

April 7, 2003

VIA FEDERAL EXPRESS

Benjamin S. Withrow, Esq.  
201 Shannon Oaks Circle  
Suite 200  
P. O. Box 1167  
Cary, NC 27512

Dear Ben:

Re: **Invention Docket No.:**  
**Title: REHOMING VIA VPN TUNNEL SWITCHING**

Nortel Networks would like to retain you to prepare and file in the United States Patent and Trademark Office (USPTO) a patent application directed to the invention disclosed in the enclosed invention disclosure by the above-referenced filing date. The application should be prepared according to Nortel Networks' guidelines in accordance with the predetermined fee we have agreed with your firm. If you are unable to perform the requested work, please advise me immediately.

In addition to the invention disclosure, an invention disclosure Review Summary document is enclosed for your consideration. We request that you contact the primary inventor, Dany Sylvain, at within two weeks of receiving this letter. Please ensure that the inventor is advised of his responsibilities regarding his duty of candor to the USPTO, as well as any other relevant rules and/or laws including the best mode requirement.

Questions pertaining to substantive issues associated with the application should be addressed with me, while administrative issues associated with the application should be addressed with Kathlyn Hunter. Please be sure that all communications associated with the application, including billing statements and the application itself bear the above-referenced disclosure number.

Please send a substantially complete and final draft of the application to me along with a completed Nortel Networks' Outsource Patent Application Checklist at least 10 days prior to the above-referenced filing date to provide Nortel Networks' Intellectual Property Law Group sufficient opportunity to review the application prior to filing. You should seek to obtain the signatures on the formal papers from all inventors directly.

**Please confirm receipt of this disclosure via facsimile to the above-identified number.  
Please include your assigned reference number.**

Upon filing the application with the USPTO, immediately fax a copy of the application transmittal letter to me, so that we have a record that the application has been filed. Thereafter, please send me a hardcopy of the application as filed along with an electronic copy in Microsoft Word 6.0 readable format on a 3 1/2" floppy disk.

Should you have any questions, please call me at :

Very truly yours,



Rick Witcher

Enclosures:    Invention Disclosure No.:  
                    Review Summary  
                    Patent Application Outsource Checklist

cc:     Dany Sylvain  
         Stephen Elliott

# **Appendix C**

## Jennifer Alkove

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**From:** Jennifer Rush Alkove [jrush@withrowterranova.com]  
**Sent:** Thursday, June 05, 2003 3:43 PM  
**To:** @nortelnetworks.com'  
**Cc:** Bsw (E-mail)  
**Subject:** First Draft of (our file 7000-265)

Dear Dany:

Please find attached a first draft of the above-referenced patent application. The .zip file is protected with the password that we have used in previous applications. If you have any problems opening the attached file, please let me know. Please review the application and drawings carefully for accuracy and completeness, making any changes, additions, or corrections, if any, directly on the application (or electronically with changes tracked).

Please recall that the application must clearly explain the best mode of practicing the invention for which protection is desired. Also, the application must explain to an individual of ordinary skill in the art how to make and use the invention. After reviewing the application, please forward any comments to Ben Withrow and me. We will then send you a revised draft of the application, along with formal paperwork prepared for your signature. After receipt of the signed paperwork and approval from Nortel's legal department, we will file the application.

Please do not hesitate to contact Ben Withrow or me should you have any questions regarding the application. Thank you for allowing us to be of service to you and for your prompt attention to this matter.

Best regards,

Jennifer Rush Alkove  
Withrow & Terranova, P.L.L.C.  
201 Shannon Oaks Circle, Suite 200  
Cary, NC 27511  
Ph:  
Fax:

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